Blended Wing Body (BWB) Paper Airplane

The good folks at NASA and McDonnell Douglas have done the ENGINEERING DESIGN, YOU are now the CHIEF DESIGNER:

1. As the CHIEF DESIGNER you must decide what your aircraft will look like. Color your BWB with crayons or markers, or decorate with stickers. You're in charge, do as you like!

2. Put your call signs on the plane. This could be a nickname.

You are now the HEAD OF MANUFACTURING:

1. As the HEAD OF MANUFACTURING, you are responsible for constructing the BWB. Follow instructions carefully to avoid a "crash-and-burn!"

2. Assemble your tools. Scissors, tape or glue stick, and two paper clips.

3. Cut out the BWB following the solid outline being careful not to cut off control surfaces or wing tips. Don't cut dashed lines!

4. Cut out the small rectangular piece. This will be the launch handle. Fold it in half and fold back the tips so that it is shaped like a "T."

5. Using the edge of a table or a ruler, fold the centerbody down along the three dotted lines

6. Fold the wings up so that they are level, and the winglets up so that they are almost vertical as illustrated below.

7. Fold the launch handle into the "T" shape and glue or tape the tabs to the under side of the BWB in the shaded area.

8. Finally, mount two paper clips on the nose of the BWB and cut the edges of the control surfaces (1 and 2). (Don't cut them off or cut the wing off, just enough so that they can be adjusted up or down.

Now, YOU are the TEST PILOT!

1. As the TEST PILOT, you have to be prepared for some wild rides! But don't worry, your parachute will keep you safe. Your job is to get your BWB to fly straight and smooth.

2. Be sure that from the front view, the BWB shape resembles that shown above. Twist trim tabs A, B, and C up a bit.

3. Hold the BWB by the launch handle and gentle toss it forward at a straight angle. If the BWB dives, adjust the trim tabs A, B and C up a bit. If the BWB goes up too steeply, adjust these trim tabs down. Continue adjusting until you get a smooth level flight.

4. Use control surfaces 1 and 2 to make the BWB turn right or left.

5. Feel free to experiment. After all you are the test pilot, so TEST!

Congratulations! You did it! Now enjoy your flights!

For more information, please contact:

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BLENDED WING-BODY PAPER AIRPLANE
BWB PA
NASA • McDONNELL DOUGLAS
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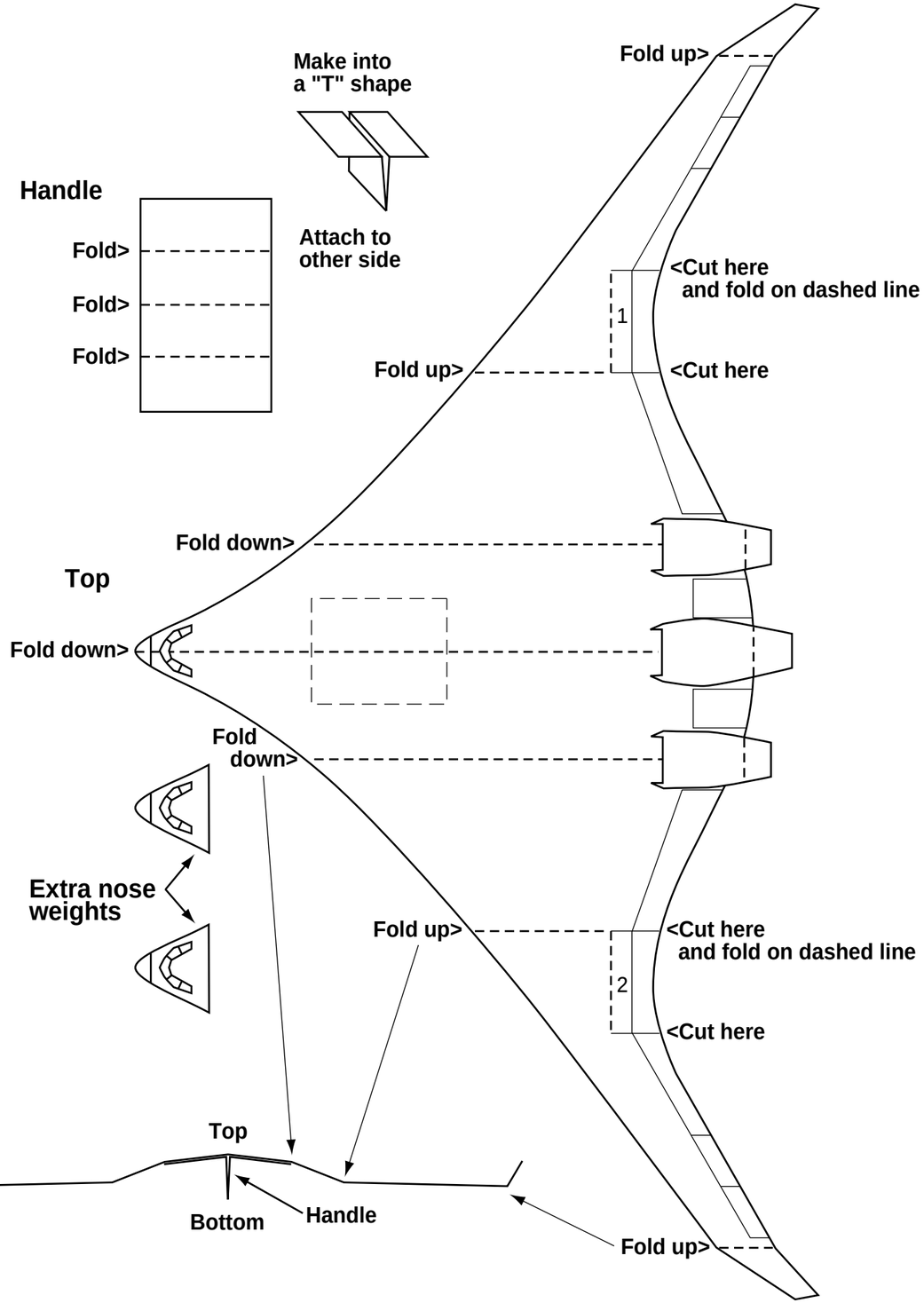

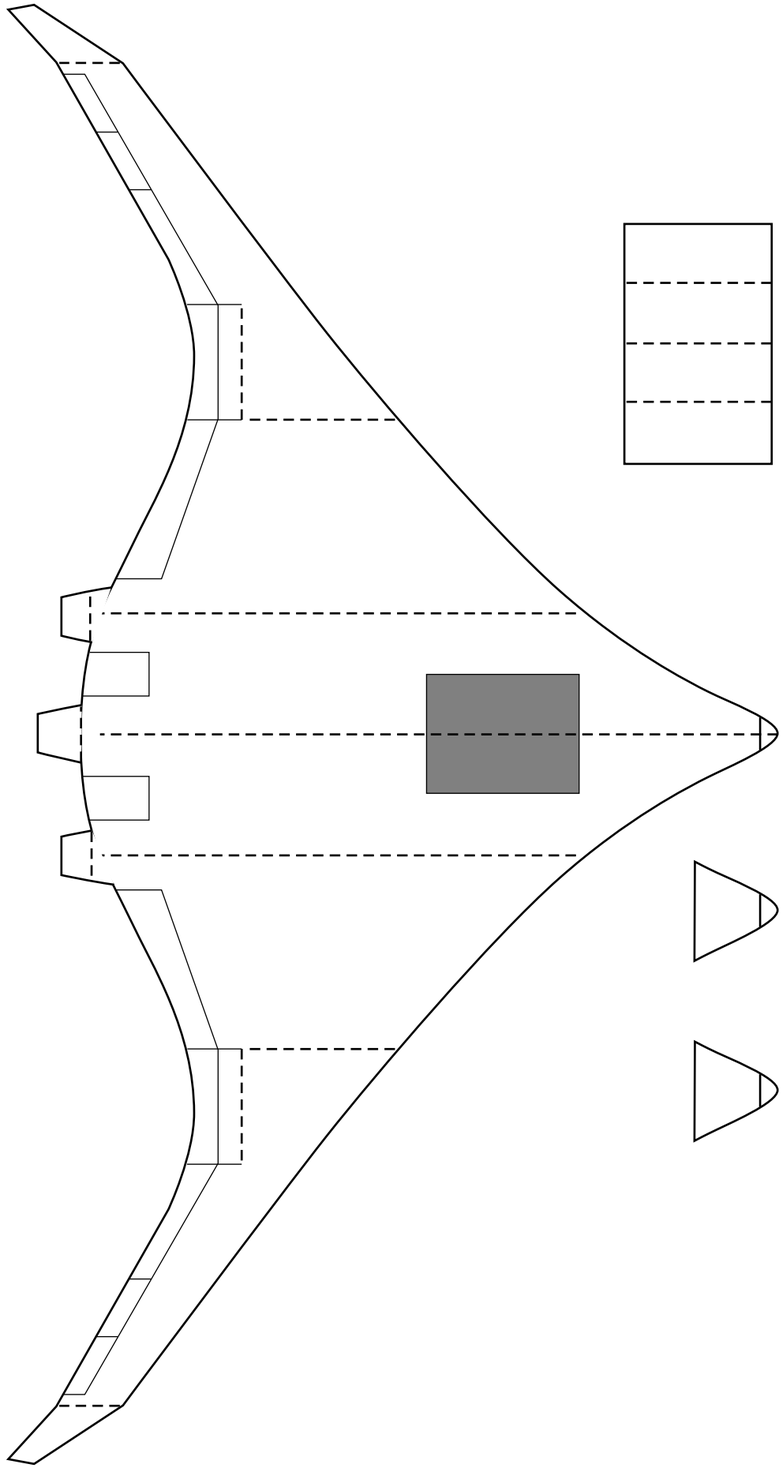

Blended Wing Body (BWB) Paper Airplane

The Blended Wing Body (BWB) Glider is a 1:400-scale model of the BWB design now being worked by a team of American companies, universities, and NASA research centers.

800 passengers would be flown inside the wing of this unique airplane. This design helps to reduce the amount of fuel required for long trips over land and sea which will reduce ticket prices for the traveller.

The unique features of the design are:

- Its wing-shaped body which holds 800 passengers, or 120 tons of cargo.

- The engines which are buried in the body and "swallow" the boundary layer air for what is called Boundary Layer Ingestion Efficiency.

- The high speed at which this thick wing will fly.

The blended wing body will be the biggest, most efficient and technologically advanced airplane ever built, and will keep America in the forefront of aerospace technology.